

I. List 3-5 Student Learning Outcomes for students enrolled in your program.

These should be broad overarching learning goals. They are bigger than objectives.

Graduates will have a strong fundamental understanding of outdoor science; a rigorous, in-depth knowledge of their specialty; understanding of the principles that guide the design and execution of high-quality teaching. Graduates will be able to teach and to communicate scientific issues and outdoor science to the public

II. Align the Program Level SLOs with the College Goals.

Briefly discuss how your program meets the goals of the college.

The Natural History Program Curriculum is very diverse and covers all areas of natural history and field biology/geology. Most courses are offered as evening and/or weekend courses to accommodate life long learners who have standard work schedules. Summer courses are offered throughout western North America and abroad. The Life and Earth Sciences Department employs a full-time lab tech who assists with support services. Many faculty maintain strong relations with local parks, outdoor education organizations, county government and local environmental organizations. The result is successful program participants.

II. Assess the student success in your program.

How do you know students learned the core SLOs by the completion of curriculum/program. Include data to support these findings.

See Documentation Below.

IV. Document student success/achievement in the program.

Possible documentation materials might include Degrees, Awards, Transfer, Portfolios, Capstone Assignments, Success in Job Placement, etc.)

The success of the Natural History Program can be measured by the success of the participants. Some use a few courses to enrich their lives or advance in their vocation or field. Some complete most of the course work and use what they've learned to strengthen a higher degree they either already have completed or are currently completing. A few graduate with a certificate. The following list of program participants, their current job or academic status, and the program courses they completed is evidence of a successful program.

Wyn Hoag; Professional Nature Photographer; general ecology, Sierra Nevada field studies; mammalogy; Pacific Northwest field studies; marine biology.

Dennis Ruttenberg; Ecology Field Technician for a consulting firm Prunuske Chatham, Inc; completed N.H. Program with certificate. A quote from him dated Oct. 1, 2007

?Thanks again for your encouragement during my coursework at the College of Marin and the Natural History Certificate program. I was amidst a career shift and your enthusiasm and great curriculum projected me to better work and bigger aspirations (graduate school). During my years at the college of Marin, the field trips to Bolinas, Eureka dunes, Mono Lake, Monterey, and the north coast were highlights. Your teaching style was very memorable??Gentle Jeffrey and Yallow Pine?

Keith Lester; Audubon Canyon Ranch Docent; mammalogy, ornithology, herpetology.

Dave Reed; Sierra Club Field Instructor; completed N.H. Program with certificate.

Bob Ball; retired chemist; completed N.H. Program with certificate. Accepted to S.F. State Graduate Program in Biology.

Jesse Warnick; Program Director/Head Naturalist, YMCA Point Bonita GGNRA, Graduated with B.S. in marine biology from U.C. Santa Cruz; general ecology, ornithology, marine biology, field ecology, marine ecology, oceanography.

Kevin Stockman; Biology Laboratory Technician; completed program with N.S. certificate and A.S. in Life Sciences.

Gwen Hiestead: Senior Field Biologist, Audubon Canyon Ranch, former part-time instructor at College of Marin, completed Masters Degree in Environmental Science at U.C.S.B.; general ecology, Sierra Nevada field studies; Pacific Northwest marine ecology, ornithology, marine biology, mammalogy.

Bob Loeper: Elementary School Teacher, owns outdoor school; herpetology, mammalogy, entomology, ornithology, astronomy.

Samantha Winegarner: Reptile Field Specialist, graduated with B.S. in Biology from Sonoma State University; mammalogy, marine mammalogy, ornithology, insects, extended field studies of National Wildlife Refuges

Tricia Mieger: Veterinary Technician; mammalogy; ornithology, marine mammalogy, marine biology.

Jayne McDonagh: Naturalist Educator for National Park Service and Private Travel Company; field biology, ornithology, mammalogy, marine biology, marine mammals, extended field studies Alaska, general ecology, field ecology. Currently working on and plans to complete requirements for N.H. certificate.

Jennifer Zellerbach: pursuing degree in conservation biology; ornithology, marine biology, extended field studies Alaska and National Wildlife Refuges.

Meryl Sundove: Director of Richardson Bay Audubon Sanctuary, teaches bird song and identification classes for local Audubon Society; ornithology I and ornithology II, entomology, mammalogy and biology of marine mammals.

Sharon Barnett: Senior Educator Richardson Bay Audubon Sanctuary, Co-director of Marin Nature Adventures, Currently completing M.A. in Education at Dominican; marine mammals, ornithology, mammalogy, extended field studies Alaska.

Ervin Wegscheider: Life long learner; has completed all courses.

Dalia Kamesar: Life long learner; marine biology, ornithology, mammalogy, extended field studies Alaska, biology of marine animals, marine mammals, general ecology.

Kathleen (Trinca) Mahan-Marris: pursuing degree in animal behavior, Wildlife Activist Point Reyes; completed N.H. Program with certificate.

Peter Eldredge: Elementary School Teacher, B.S in Marine Biology from U.C. Santa Cruz; completed all courses in Natural History Program except climatology.

Andrew Eldredge: Completed B.A. in Environmental Studies U.C. Berkeley and Masters in Holistic Sciences from Schumacher College Great Britain, currently a Naturalist Educator; completed all program courses except climatology and field geology.

Kim Smith: currently completing B.S. in Biology at U.C.S.C.; Kim has worked her way through college teaching children natural history, she works freelance and for the Bolinas Summer Camp for the past 6 years; has completed all N.H. courses and has not applied for the N.H. certificate

Susan Allen: Professional Journalist and Cinematographer; has completed all course in the N.H. Program except extended field studies

Betsy Richardson: First Grade Teacher at Marin Primary School; has taken all N.H. courses except geology.

Leticia Gallardo: Biology Professor at Foothill College, former Part-Time Teacher at COM, completed M.S. in Biology (Herpetology) at Univ. of Arizona; marine biology, ornithology, mammalogy, extended field studies Alaska, biology of marine animals, general ecology, ornithology, herpetology.

Iana Devai: Freelance Elementary School Teacher Marine County; has completed all N.H. courses except geology courses.

May Chen is probably one of the premier naturalists in the San Francisco Bay Area, She is or has been a docent at just about every non-profit Nature education institution in the Bay Area, she is also a prime research resource for just about every professional naturalist in the Bay Area; all courses for the N.H. Program have been completed except for climatology.

Ron Davis: Life long learner: has completed all courses in the N.H. Program

Daniel Edelstein; Senior Field Consultant for environmental. research firm; mammalogy, ornithology

Jessica Smith; B.A in Environmental Science from Evergreen College Washington State; general ecology, marine biology, marine ecology field studies, extended field studies Southwest Deserts.

Charlotte Torgovitsky: Head Naturalist at Marin Art and Garden Center in Ross where she has developed a unique Nature Education program for children; ecology, marine mammals, ornithology, mammalogy, field botany, insects.

These are just a few examples of our Natural History Program Participants and how they make our community a better place by what they have learned from the Program. Please contact Joe Mueller ex 7537, or Joe.mueller@marin.edu for more examples if needed.

V. Note areas for future improvement.

Address needs of program like curricular innovation, resource allocation, upgrading facilities, technology, unit allocation, staffing, etc.

We have the only Natural History Program in the state of California. We have the most diverse and accessible outdoor environment in the state of California. We also are one of the only biology departments with a field program that doesn't have their own transportation. INstructors must arrange rental vehicles for every extended field trip offer. This is a significant inconsistency and should be a number one priority to continue to maintain a successful program.

Currently it takes the average Natural History Program participant five years to complete the certificate. If we were able to offer more evening courses they would be able to complete the certificate in less time. For this to occur our department would need more units allocated for staffing.

